

EMBRACE WATCH DATA ANALYZER MANUAL

Ver 1.0

PURPOSE:

The purpose of this document is to overview the functions of the Embrace Watch Data Analyzer application.

Table of Contents

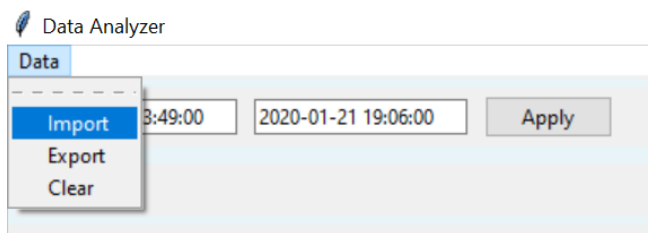
PURPOSE	1
TABLE OF CONTENTS.....	2
SECTION I: What is the Embrace Watch Data Analyzer?	3
SECTION II: Importing Your Data	3
SECTION III: Manipulating Your Imported Data.....	3
DATE TIME RANGE AND TIME ZONE	4
GRAPH DELETION	4
AGGREGATION	5
MOVE GRAPH UP OR DOWN.....	3
QUERY	5
SECTION IV: Analyzing Your Imported Data	6
DESCRIBE.....	6
CHANGE GRAPH STYLE	7
SECTION V: Exporting Your Data	8
EXPORT TO CSV	8
SAVE FIGURE AS IMAGE	8

SECTION I: What is the Embrace Watch Data Analyzer?

The Embrace Watch Data Analyzer is an application intended to take data from the Embrace Watch in the format of a csv to then process, graph, and analyze. The app is not designed to take data not from the Embrace Watch, nor can it record new data.

SECTION II: Importing Your Data

The app initially does not have any data imported. To begin importing, hover over “Data”, then click “Import” as seen below:



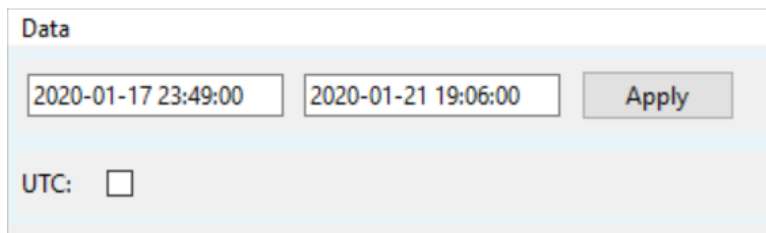
A new window with various options will open. Based on your selections the data that is imported for graphing and analysis changes.

- Embrace Watch User ID – Determines which user’s data will be imported.
- Date Start – The Date and Time that determines where the data graphs will begin.
- Date End – The Date and Time that determines where the data graphs will end.
- UTC – When checked, data will be displayed in UTC.
- ACC Avg Magnitude – When checked, the average acceleration magnitude will be graphed.
- EDA Avg – When checked, the average electrodermal activity will be graphed.
- Temperature Avg – When checked, the average temperature will be graphed.
- Movement Intensity – When checked, the movement intensity will be graphed.
- Steps – When checked, the steps will be graphed.
- Rest – When checked, rest time will be graphed.
- On Wrist – When checked, whether or not the watch was on the user’s wrist will be graphed.
- Toggle All – When checked will check or uncheck every other field.

SECTION III: Manipulating Your Imported Data

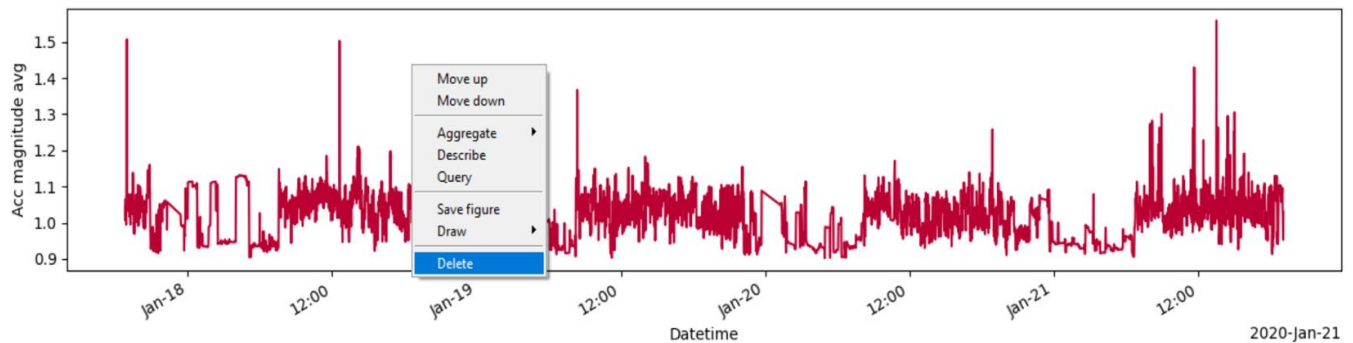
There are a few ways to manipulate the imported data even after the initial import:

1. **DATE TIME RANGE AND TIME ZONE:** At the top of the window are two boxes to quickly change the data range of the data, and whether the time zone is UTC. Changing either of these will re-graph the data.

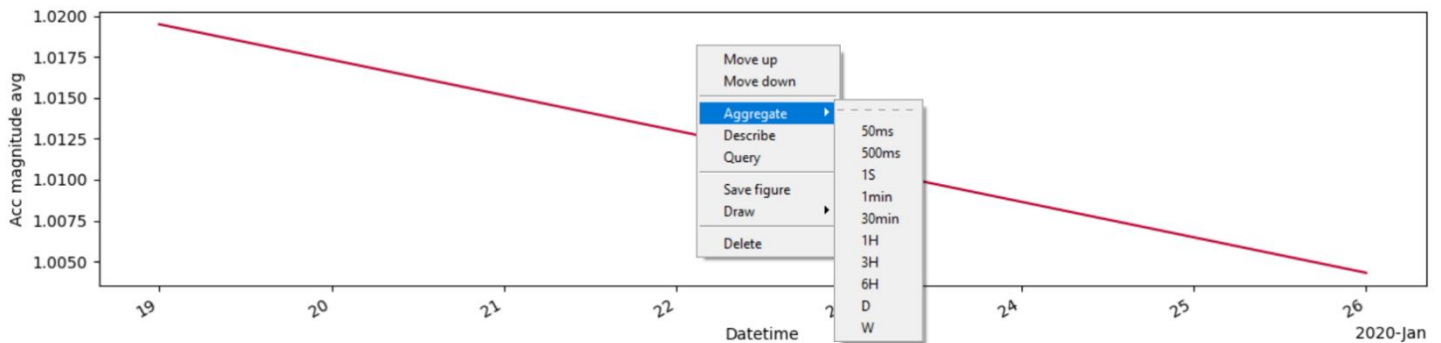


The screenshot shows a 'Data' control panel. It contains two text input fields for date ranges: '2020-01-17 23:49:00' and '2020-01-21 19:06:00'. To the right of these fields is an 'Apply' button. Below the date fields is a label 'UTC:' followed by an unchecked checkbox.

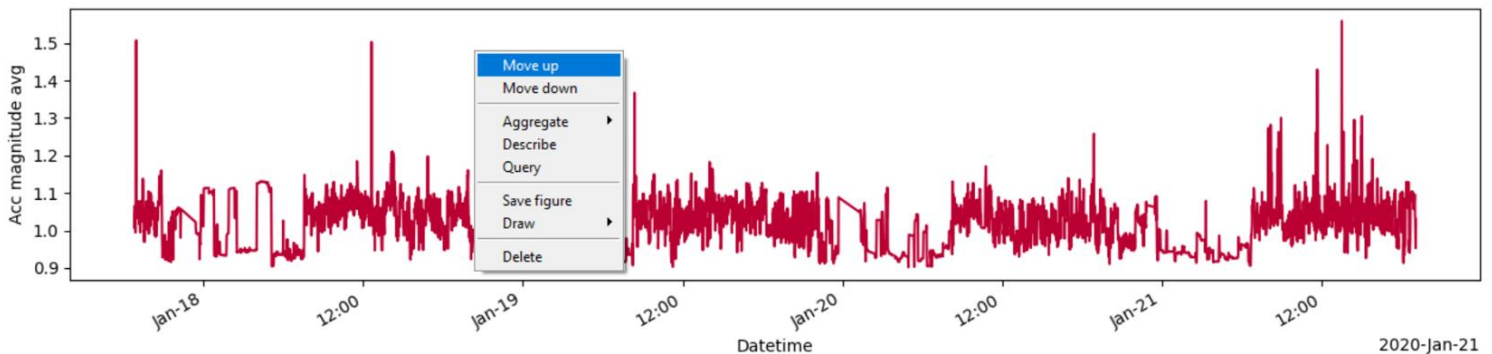
2. **GRAPH DELETION:** To delete a graph of a specific field, right click the desired graph for deletion and click "Delete".



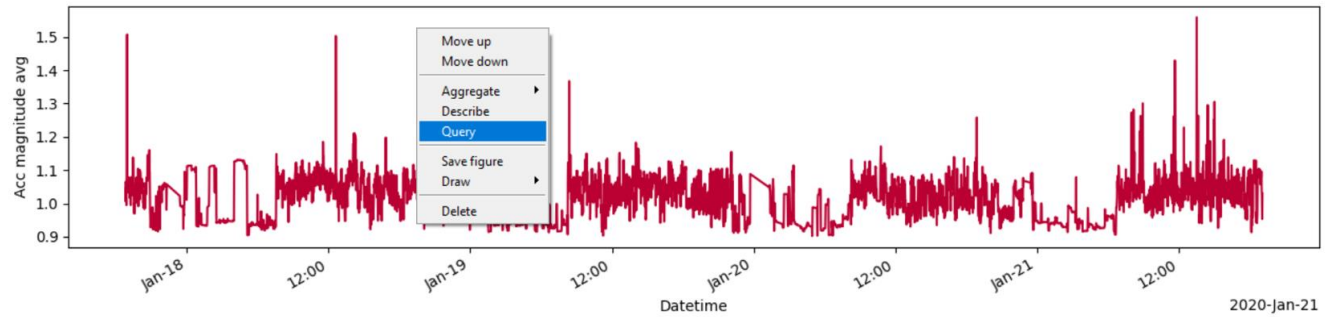
3. **AGGREGATION:** To aggregate your graph by different time intervals, right click a graph, hover over “Aggregate”, then select your aggregation interval.



4. **MOVE GRAPH UP OR DOWN:** To move a graph down, simply right click and select “Move Down”. Similarly, to move a graph up right click and select “Move up”. This will change the order of the graphs.



5. **QUERY:** To filter imported data via an SQL-styled query, simply right click and select query. A new window will open with a sample query ready. Write a valid query, using backticks (‘) when referring to data fields, and click apply. Your data will now be filtered accordingly. To undo this query, click the undo button.



Query

```
SELECT `Steps count`
FROM data;
```

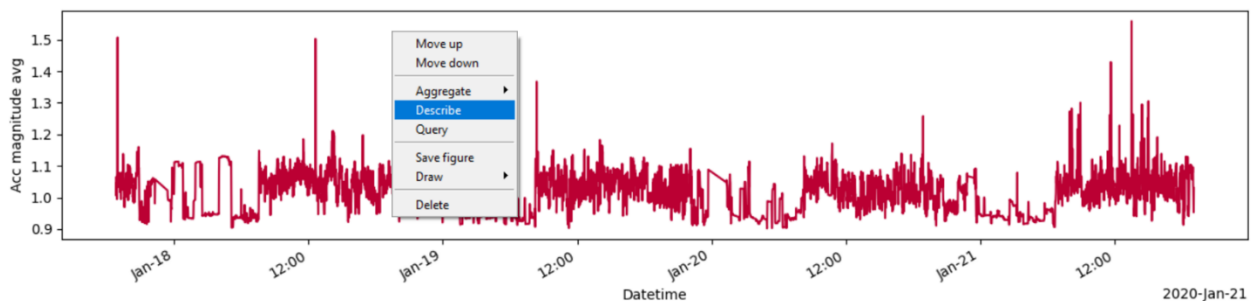
Query ran successfully

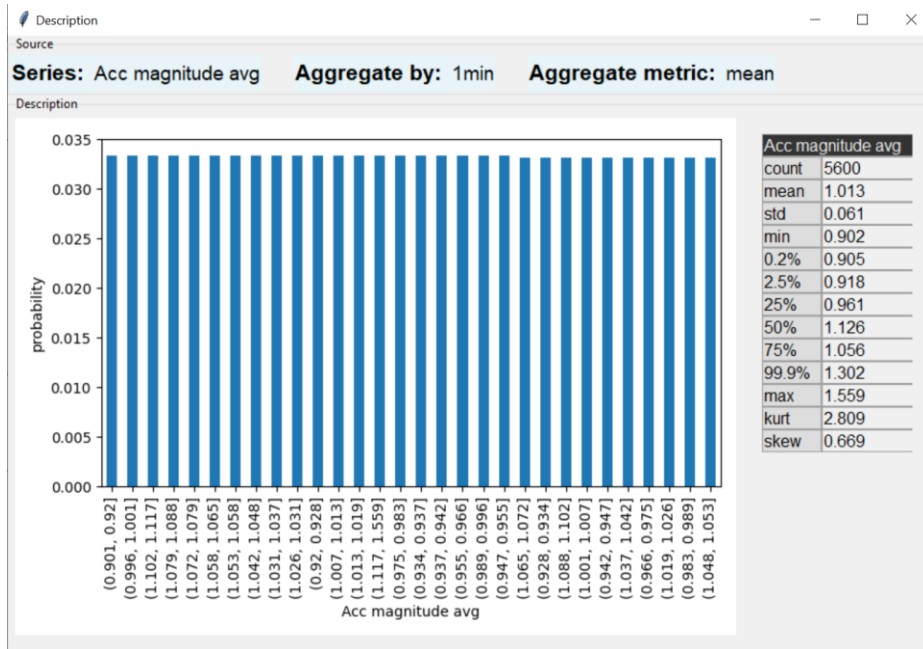
Undo Apply

SECTION IV: Analyzing Your Imported Data

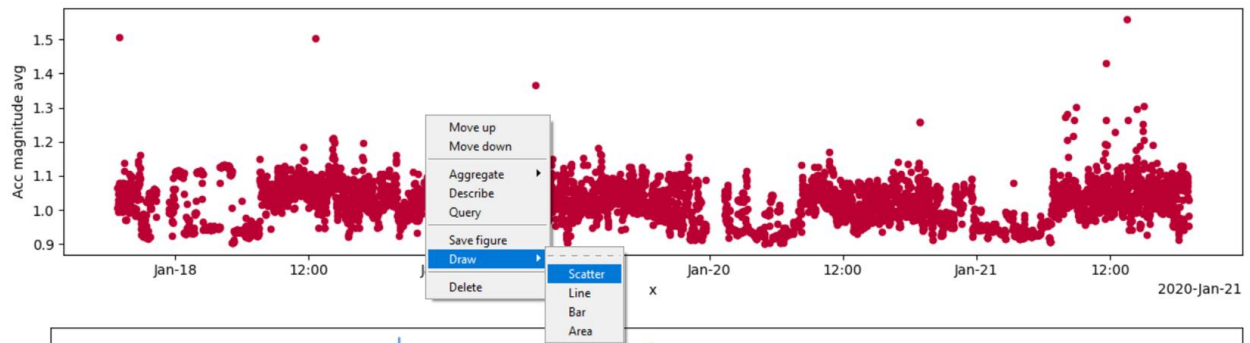
There are a few ways to analyze the imported data:

1. **DESCRIBE:** By right clicking a graph and then clicking “Describe”, you can view a number of data points that may be helpful for your analysis as seen below:





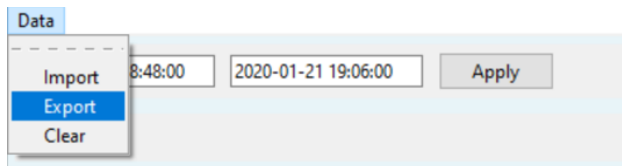
2. CHANGE GRAPH STYLE: Another type of chart may give the user more insight on the data. To change the type of graph of a selected figure, right click, hover over the “Draw” dropdown, and select the figure type.



SECTION IV: Exporting Data

Users can either export your filtered data into another csv, or save figures as png images.

1. **EXPORT TO CSV:** To export data to a csv, click Data then Import on the top left of the main window. A file explorer window will appear, asking for the file path to save the csv to.



2. **SAVE FIGURE AS IMAGE:** To save a figure as an image, right click the desired figure and click “Save figure”. Similarly, a file explorer window will appear asking the user where to save the image.

